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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,864	11/30/2001	George Alexander Reid Wilkie	2705-202	6856

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EXAMINER	
SHAH, CHIRAG G	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/998,864	WILKIE ET AL.	
	Examiner	Art Unit	
	Chirag G. Shah	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 4/11/06.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-34 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-34 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed 4/11/06, with respect to Sitaraman being commonly owned with the instant application have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Macridis et al. (U.S. Patent No. 6643515).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1, 4-10, 12-15, 18-22, 25-28, 31, and 33-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Giroux et al. (U.S. Patent No. 6,370,116), hereinafter Giroux in view of Macridis et al. (U.S. Patent No. 6,643,515), hereinafter Macridis.

Regarding claim 1, Giroux discloses of an network device [switching node 14, see fig. 1 and claim 1], comprising:

an input port to receive input data [a switching node includes a input port for receiving packet, see fig. 1 and claim 1];

a transmission port to transmit data at a transmission rate [the incoming data packets having a committed information rate (CIR) are accepted an delivered at the respective rate, see claim 1 and col. 3, lines 50-67];

a detector [access point 14 of fig. 1 is able to distinguish each information packet having either a committed delivery class or non-committed delivery class, see col. 4, lies 19-37];

a controller to set the maximum transmission rate equal to the first traffic rate when the detector detects *a committed deliver class packet* [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate, see claim 1 and col. 3, lines 50-67].

Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by

reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 10, Giroux discloses of an network device [switching node 14, see fig. 1 and claim 1] including a method, comprising:

means [access point/switching node 14, fig. 1] for detecting traffic in a network device [access point 14 of fig. 1 is able to distinguish by detecting each information packet as having either a committed delivery class or non-committed delivery class, see col. 4, lines 19-37]; and

means [the access/switching node inherently includes a controller] for reducing a maximum transmission rate to a first traffic rate in response to the real-time traffic [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate, the rate may be reduced from max EIR of previous packet to CIR based on the packet status see claim 1 and col. 3, lines 50-67].

Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and

video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 15, Giroux discloses of an network device [switching node 14, see fig. 1 and claim 1] including a method, comprising:

detecting traffic in a network device [access point 14 of fig. 1 is able to distinguish by detecting each information packet as having either a committed delivery class or non-committed delivery class; see col. 4, lines 19-37]; and

reducing a maximum transmission rate to a first traffic rate in response to the real-time traffic [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate, the rate may be reduced from max EIR of previous packet to CIR based on the packet status see claim 1 and col. 3, lines 50-67].

Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel

capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 22, Giroux discloses an article [software within the switching node 14 of fig. 1] containing machine readable code that, when executed, causes the machine to [switching node 14, see fig. 1 and claim 1]:

Detect traffic [access point 14 of fig. 1 is able to distinguish by detecting each information packet as having either a committed delivery class or non-committed delivery class, see col. 4, lines 19-37]; and

Reduce a maximum transmission rate to a first traffic rate in response to the real-time traffic [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate, the rate may be reduced from max EIR of previous packet to CIR based on the packet status see claim 1 and col. 3, lines 50-67].

Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 25, Giroux discloses of an network device [switching node 14, see fig. 1 and claim 1] including a method, comprising:

monitoring a port electrically coupled to a *packet* source for data from the source [access point 14 of fig. 1 is able to monitor by detecting each information packet as having either a committed delivery class or non-committed delivery class, see col. 4, lines 1-18];

and

reducing a maximum transmission rate to a first traffic rate prior to real-time data being transmitted from the source [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate prior to each data packet being transmitted from the source, see claim 1 and col. 3, lines 50-67]. Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 31, Giroux discloses of an network device [switching node 14, see fig. 1 and claim 1] including a method, comprising:

receiving a resource reservation request for *committed information* data to be transmitted along a path in a network [access point 14 of fig. 1 is able to receive transmit and route the requested packet having a committed delivery class packet along either a path in a network, based on defined rate limits for each class of information, see col. 4, lines 19-37 and claim 1];

reducing a maximum transmission rate to a first traffic rate [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate, the rate may be reduced from max EIR of previous packet to CIR based on the packet status see claim 1 and col. 3, lines 50-67].

Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 4, Giroux discloses in col. 3, lines 50-60 that wherein the maximum transmission rate is between the first traffic rate (CIR) and a second traffic rate (EIR) as claim.

Regarding claim 5, Macridis discloses in col. 9, lines 59-67 wherein the real-time input data is voice data (voice data is any data that needs to be presented in approximately real-time).

Regarding claim 6, Macridis discloses in col. 9, lines 59-67 and col. 10, lines 11-48 wherein the input data may be a real-time data such as voice or video data.

Regarding claim 7, Giroux discloses wherein the detector (within the switching node 14 of figure 1) detects a characteristic (status of information packet, see col. 3,lines 50-67) of the input data to identify the input data as committed information input data (see col. 3, lines 50-67 and claim 1). Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time.calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of

the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 8, Giroux discloses wherein the detector (within the switching node 14 of figure 1) detects *committed information status* of input data by determining a source address [the packet will have been marked up-stream with a flag in compliance with a negotiated committed information rate, see col. 4, lines 52-60, the switching node 14 must inherently detects the committed information status flag upon stripping the header of the packet including source address]. Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as

disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 9, Giroux discloses wherein the detector (within the switching node 14 of figure 1) detects *committed information status* of input data by determining a source port [the packet will have been marked up-stream with a flag in compliance with a negotiated committed information rate, see col. 4, lines 52-60, the switching node 14 must inherently detects the committed information status flag upon stripping the header of the packet including source address port]. Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by

reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 12, Giroux discloses wherein the means [inherently within the switching device 14 of figure 1 and col. 4, lines 18-37] for detecting further comprises a detector module [see col. 4, lines 18-37, fig. 1 and claim 1].

Regarding claim 13, Giroux disclose wherein the means for reducing a maximum transmission rate further comprises a controller [the access/switching node inherently includes a controller since the switching node is able to accept and set forward each data packet having a CIR delivery status with a CIR Rate, see claim 1 and col. 3, lines 50-67].

Regarding claim 14, Giroux discloses in col. 3, lines 50-67, figure 1 and claim 1wherein the means (access point 14 of figure 1) for detecting and the means for reducing a maximum transmission rate are included in one component.

Regarding claim 18, Giroux discloses in col. 3, lines 50-67 further comprises examining data as it passes through a network device (switching device 14 of figure 1) as claim.

Regarding claim 19, Giroux discloses in col. 3, lines 50-60 wherein the data further comprises packets.

Regarding claim 20, Giroux disclose wherein detecting real-time traffic further comprises monitoring a port electrically coupled to a source of real-time data [access point 14 of fig. 1 is able to monitor by detecting each information packet as having either a committed delivery class or non-committed delivery class, see col. 4, lines 1-18]. Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 21, Giroux discloses wherein detecting real-time traffic further comprises reception of a resource request [access point 14 of fig. 1 is able to receive transmit and route the requested packet having a committed delivery class packet along either a path in a

network, based on defined rate limits for each class of information, see col. 4, lines 19-37 and claim 1].

Regarding claim 26, Macridis discloses in col. 9, lines 59-67 wherein the real-time input data is voice data (voice data is any data that needs to be presented in approximately real-time).

Regarding claim 27, Macridis discloses in col. 9, lines 59-67 and col. 10, lines 11-48 wherein the input data may be a real-time data such as voice or video data.

Regarding claim 28, wherein reducing a maximum transmission rate further comprises: receiving a signal from the source that data from that source is going to be transmitted [a packet of information is received at the access point including a committed status information, see col. 3, lines 50-67 and claim 1]. Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include

assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Regarding claim 33, Giroux discloses wherein the first traffic rate is provided in the resource reservation request [access point 14 of fig. 1 is able to receive transmit and route the requested packet having a committed delivery class packet along either a path in a network, based on defined rate limits for each class of information, see col. 4, lines 19-37 and claim 1].

Regarding claim 34, Giroux discloses wherein the first traffic rate is predetermined [access point 14 of fig. 1, the requested packet having a committed delivery class packet along a path is based on defined rate limits for each class of information, see col. 4, lines 19-37 and claim 1].

4. Claims 2, 3, 11, 16-17, 23-24, 29-30 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Giroux in view of Macridis as applied to claim above, and further in view of Chien et al. (U.S. Patent No. 6,891,832), hereinafter Chien.

Regarding claim 2, Giroux in view of Macridis teaches of a network device for detecting a real-time input data and setting a first traffic rate. Giroux in view of Macridis fails to disclose wherein the network device includes a timer to track occurrences of real-time input data. Chien

discloses in figure 5 and col. 12, lines 28-35 that a router or a switch includes a timer for maintaining interval and timer count values, detecting real-time set-up or disconnect signals. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to include into Giroux in view of Macridis' invention the features of a switching node including a timer as taught by Chien. One is motivated as such in order to improve network performance by utilizing and allocating the bandwidth rate based on real-time traffic non-real time traffic application.

Regarding claim 3, Giroux in view of Macridis discloses of a network device that sets the rate upon detecting a real-time input data. Giroux in view of Macridis fails to disclose of wherein the controller increases the traffic rate above the first traffic rate when the timer expires. Chien discloses in figure 5 and col. 12, lines 28-35 that a router or a switch includes a timer for maintaining interval and timer count values, detecting real-time set-up or disconnect signals. Thus, clearly suggesting that when the real-time interval disconnects and applying Giroux in view of Macridis, the next packet may be a bursty traffic with an EIR status rate assuring that the EIR bursty rate increases the traffic rate from CIR. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to include into Giroux in view of Macridis' invention the features of a switching node including a timer as taught by Chien. One is motivated as such in order to improve network performance by utilizing and allocating the bandwidth rate based on real-time traffic non-real time traffic application.

Regarding claims 11, 16, 23, 29 and 32, Giroux discloses in col. 3, lines 50-67 and col. 4, lines 52-60 that an access point includes a means for allowing the maximum transmission rate to exceed the first rate if the packet status is EIR. Giroux in view of Macridis discloses of a network device that sets the rate upon detecting a real-time input data. Giroux in view of Macridis fail to disclose wherein the network device further comprises a means for detecting a cessation of real-time traffic. Chien discloses in figure 5 and col. 12, lines 28-35 that a router or a switch includes a timer for maintaining interval and timer count values, detecting real-time set-up or disconnect signals. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to include into Giroux in view of Macridis' invention the features of a switching node including a timer as taught by Chien. One is motivated as such in order to improve network performance by utilizing and allocating the bandwidth rate based on real-time traffic non-real time traffic application.

Regarding claims 17 and 24, Giroux in view of Macridis discloses of a network device that sets the rate upon detecting a real-time input data. Giroux in view of Macridis fail to disclose wherein detecting a cessation of real-time traffic further comprises monitoring a timer for expiration, wherein the timer is reset upon each occurrence of real-time data. Chien discloses in figure 5 and col. 12, lines 28-35 that a router or a switch includes a timer for maintaining interval and timer count values, detecting real-time set-up or disconnect signals. Thus, the timer logs interval values and inherently resets upon disconnect signals to restart detecting real-time interval. Therefore, it would have been obvious to one of ordinary skills in the art at the time of

the invention to include into Giroux in view of Macridis' invention the features of a switching node including a timer as taught by Chien. One is motivated as such in order to improve network performance by utilizing and allocating the bandwidth rate based on real-time traffic non-real time traffic application.

Regarding claim 30, Giroux discloses in col. 3, lines 50-67 wherein the method further comprises receiving a signal from a source indicating that the source (committed information) has ceased transmission of the data [the first packet comes in with a committed information rate status and then when a second packet comes in with a non-committed information status from the source indicates that the transmission of committed information status packet has been ceased, see col. 3, lines 50-67 and claim 1]. Giroux fails to explicitly disclose of a detector detecting a committed delivery class corresponds to real-time input data. Macridis discloses in col. 9, lines 59-67 and col. 10, lines 1-11 &36-46 that real-time calls such as voice call are given a maximum bit rate equal to its committed bit rate, which is the bit rate required for voice signal. Non real-time low bit rate application such as e-mail is assigned remaining slots available when there is any unused channel capacity. This clearly suggests that the real-time voice data will be recognized and assigned a maximum bit rate equal to its committed access rate. Furthermore establishing that committed information rate is set to the maximum transmission rate for real-time data such as voice and video. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Giroux to include assigning maximum transmission rate equal to committed information rates corresponding to real-time data such as voice and video as disclosed by Macridis. One is motivated as such in

order to provide quality of service by reducing the delay and maintain a network bandwidth management scheme that is consistently applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G. Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7682. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cgs
June 19, 2006

Chirag Shah
Patent Examiner, Division 2616